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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,148	12/27/2004	Carlo A. Buzzi	6722-01WOUS	8473

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EXAMINER

DOAN, ROBYN KIEU

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,148

Applicant(s)

BUZZI, CARLO A.

Examiner

Robyn Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/08/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Donovan (IDS cited reference 4,523,600).

With regard to claim 1, Donovan discloses a tooth cleaning means (floss 11, figs. 8-11) comprising multifilament threads (11), wherein the threads being highly-elastically stretchable (polyester col. 3, line 1, Applicant is noted that it is known that the property of polyester is very elastic) and under the effect of tensile forces, their cross-sectional area reduce. Donovan also shows the tooth cleaning means being formed into a formation which has an abrasively acting surface (col. 5, lines 35-39) and also being endlessly (figs. 8-11). The multifilament threads inherently being connected among one another such that a severing is possible without the threads coming undone. With regard to limitations “the threads by way of textile processing, specifically by one of the methods from the selection of braiding, weaving or knitting”, such process is not given patentable weight in an article claim. In regard to claims 2 and 3, Donovan shows the multifilament threads being unreleasably connected among one another (at 12a, fig. 8)

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by adhering (col. 3, lines 8-9). In regard to claim 8, Donovan shows the multifilament threads being coated with tooth caring means (wax, col. 5, lines 45-46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawton (U.S. Pat. # 1,839,486) in view of Muhler et al (U.S. Pat. #3,699,979).

With regard to claim 1, Lawton discloses a tooth cleaning means (fig. 1) comprising multifilament threads (10, 11) being braided to one another, wherein the threads being highly-elastically stretchable (rubber col. 3, lines 15-18) and under the effect of tensile forces, their cross-sectional area reduce. The multifilament threads inherently being connected among one another such that a severing is possible without the threads coming undone. Lawton does not disclose the multifilament threads having an abrasively acting surface. Muhler et al discloses a tooth cleaning means (fig. 2) comprising a plurality of woven threads (22) having abrasive (26, col. 2, lines 55-56) on the surface of the tooth cleaning means. It would have been obvious to one having an ordinary skill in the art at the time the invention was made to employ the abrasive particles as taught by Muhler et al into the braided multifilament threads of Lawton in

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order to better clean the teeth of the user. With regard to claim 8, Lawton discloses the multifilament threads being coated with tooth or gum caring means (col. 4, lines 28-32).

In regard to claim 7, Lawton also discloses the multifilament threads consisting of the same or different materials (col. 3, lines 34-36). Lawton in view of Muhler et al fail to show the multifilament threads being integrated with cross sectional areas differing greatly in size, however, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to construct cross sectional areas of the multifilament threads differing greatly in size, since such a modification would have involved a mere change in the size component. A change in size is generally recognized as being within the level or ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donovan in view of Bible et al (U.S. Pat. # 5,865,197).

With regard to claims 4-6, Donovan discloses a tooth cleaning means comprising all the claimed limitations in claim 1 as discussed above except for an oblique cut separating location, the multifilament threads having at least one thread in a different color than the remaining ones and at least one thread with a bright and a dark color tone. Bible et al discloses a dental floss (fig. 8) comprising a plurality of strands (14, 15), each being different color (col. 3, lines 30-41). It would have been obvious to one having an ordinary skill in the art at the time at the invention was made to apply the technique of using different color in a plurality strands of a dental floss as taught by Bible et al into

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the tooth cleaning means of Donovan for the purpose of providing a visual stimulus to the consumer. It would also have been obvious to one having an ordinary skill in the art at the time the invention was made to construct an oblique cut separating location and a bright and dark color tone for at least one thread, since such a modification would have involved a mere change in the shape and color of a component and one would expect an equivalent effect with the modified element. A change in shape and color is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Donovan in view of Standish (U.S. Pat. # 3,838,702).

With regard to claim 9, Donovan discloses a tooth cleaning means comprising all the claimed limitations in claim 1 as discussed above except for the multifilament threads being made of latex. Standish discloses a dental floss being made of latex (col. 1, lines 46-47). It would have been obvious to one having an ordinary skill in the art at the time the invention was made to employ the latex material as taught by Standish into the multifilament threads of Donovan in order to provide sufficient strength to the tooth cleaning means.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson, Pesce, Leonard, Eaton and Gudebrod are cited to show the state of the art with respect to a braided dental floss.

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The drawings filed 11/08/2001 have been approved by the Examiner.

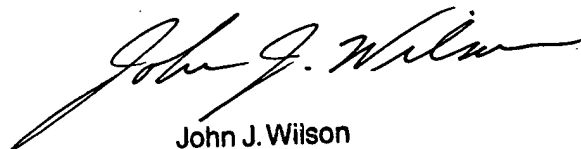
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robyn Doan whose telephone number is (571) 272-4711. The examiner can normally be reached on Mon-Fri 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robyn Doan
Examiner
Art Unit 3732



John J. Wilson
Primary Examiner